CULTURAL RESOURCES SURVEY OF FOUR AREAS OF THE JARVIS COVE SUBDIVISION, HILTON HEAD ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA

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CHICORA RESEARCH CONTRIBUTION 343

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ABSTRACT

This report provides the results of a cultural resources investigation of approximately 40.1 acres that will be part of the Jarvis Cove Subdivision on the north side of Jonesville Road on Hilton Head Island, Beaufort County, South Carolina. The study was conducted by Dr. Michael Trinkley of Chicora Foundation for Mr. Tim Wright of Coastal Surveying Company, one of the partners in the proposed development. The study is in anticipation of the construction of a subdivision of single family homes on the tract and is intended to assist the developers comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800, as well as the Town of Hilton Head Island's Ordinance 90-16.

This small tract was originally part of Lot 11 on the 1783 Mosse survey of Hilton Head Island was eventually part of Honey Horn Plantation in the antebellum period. Our review of available maps suggests that the property was intensively cultivated from at least the early nineteenth century. By the postbellum parts of this portion of Honey Horn were being sold to African Americans and it was probably in the late nineteenth or early twentieth century that the area became known as the Jonesville community (the road still bears this name). It was not included in the Honey Horn Plantation of the mid-twentieth century and is not shown on the 1950 Timber Map of the plantation. Modern aerial photographs reveal that the area was being intensively cultivated into the last quarter of the twentieth century.

The Jonesville Road area, situated between Old House Creek to the south and Jarvis Creek to the north, is one of the few largely undeveloped or partially rural areas of Hilton Head Island. Consequently, the area of potential effects (APE) was defined as 1.0 mile. Examination of the S.C. Department of Archives and History GIS database failed to identify any National Register sites within the APE. Hilton Head Island was excluded from the 1998 architectural survey of Beaufort County and there are no architectural sites recorded for this APE.

Seven archaeological sites (38BU851-856,and 38BU1902) and two isolated finds, however, have been previously recorded within 0.5 mile of the survey area. Three of these sites, 38BU851-853, located on the north end of the current survey tract on the marsh edge of Jarvis Creek, were recorded by Chicora Foundation in 1986. None of these sites have been assessed for their National Register eligibility. Site 38BU854, located along the shoulder of Jonesville Road, southwest of the current project area, consists of a nineteenth or twentieth century site combined with an unknown prehistoric component. This site was originally recorded by Chicora Foundation in 1986, and was revisited by Brockington and Associates in 1996. Both recommended additional work on the site before a National Register determination could take place. Sites 38BU855 and 38BU856 were also recorded by Chicora Foundation in 1986. Both sites consist of shell middens, with only one site, 38BU856, producing artifacts dating to the Early Woodland. The eligibility of these sites has not been determined.

While performing an earlier survey on a 6 acre tract for the Jarvis Cove Subdivision, southwest of the current project area (see Trinkley 2001), one site, 38BU1902, was uncovered. This prehistoric site failed to provide enough information to answer any significant research question and was found not eligible for inclusion on the National Register of Historic Places. Also found during this survey were two isolated finds, most likely related to a nearby modern structure. Both of these finds were also determined not eligible for inclusion on the National Register of Historic Places.

The architectural survey consisted of driving public roads within the APE looking for any structures at least 50 years old which retain integrity. None were identified.

The archaeological survey consisted of shovel testing at 100 foot intervals along transects laid out at 100 foot intervals through Area 1 of the tract, and 50 foot intervals along transects laid out at 50 foot intervals in Areas 2-4. A total of 285 shovel tests were excavated along 53 transects.

As a result of these investigations, the three sites previously found on the survey tract, 38BU851-853, were updated and their exact locations were noted. Because of these new investigations, we are now recommending sites 38BU852 and 38BU853 eligible for inclusion on the National Register. Due to the severe erosion, site 38BU851 is recommended not eligible for inclusion on the National Register.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

Project Background

The investigation of the proposed 40.1 acres for the Jarvis Cove Subdivision was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tim Wright of Coastal Surveying Company. The field crew included Mr. Tom Covington and Ms. Nicole Southerland.

The proposed subdivision is situated on the northwestern edge of Hilton Head Island in southern Beaufort County, about 19 miles southwest of Beaufort and about 7 miles southeast of Bluffton (Figure 1). The tract is on Jonesville Road about a mile west of its junction with Spanish Wells Road and is situated between Old House Creek to the south and Jarvis Creek to the north. This particular area of Hilton Head Island was historically associated with Honey Horn Plantation through the mid-nineteenth century. In the late nineteenth and early twentieth century the sale of land to African Americans helped created the Jonesville community, for which the road is named. It remained a rural enclave on Hilton Head until the construction of the Cross Island Connector. Today, much of this rural character is being lost and the area is rapidly being developed. This work was conducted to assist the owners of the property comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800, as well as Town of Hilton Head Island Ordinance 90-16.

The tract consists of four irregularly shaped areas which are located between Jonesville Road to the south and border Jarvis Creek to the north (Figure 2). Area 1 contains about 26.1 acres, Area 2 has 4.35 acres, Area 3 has 6.96 acres, and Area 4 consists of 2.73 acres. At the time of this study the tract was wooded in a mixture of older live oaks (Figure 3), younger hardwoods and palms (Figure 4) which had grown up on the tract since it was last cultivated, and pine forests (Figure 6). An open field was situated on the western side of Area 1 (Figure 7). The area has recently been used for horse trails, so much of the area is open, with only a few areas of thick vegetation.

Chicora was requested to survey the property by Mr. Wright, one of two owners, in August. The field investigations were conducted from August 22-24, 2001. The architectural survey, however, was conducted during a previous survey in the same area during January and had required 2 person hours.

Although there is some residential development taking place in the project area, much of the vicinity retains a rural character which is increasingly rare on Hilton Head Island. As a result, we have defined the area of potential effect (APE) for this project to be 1.0 mile.

The statewide archaeological site files held by the South Carolina Institute of Archaeology and Anthropology were examined by Ms. Nicole Southerland for information pertinent to the project area. There are a number of archaeological sites in the general area, most being previously identified during a 1986 reconnaissance level investigation by Chicora Foundation for the Town of Hilton Head Island (Trinkley 1987). Three of these sites, 38BU851-853, are situated in the northern section of the study area, within Areas 2-4 of the survey. Another, 38BU854, was found in the Jonesville Road (which at that time was dirt) southwest of this study tract. A fourth site, 38BU1610, was recorded in 1996 as a result of a survey conducted prior to the paving of Jonesville Road. Both 38BU854 and 38BU1610, which were apparently determined not eligible by the State Historic Preservation Office, are thought to have been destroyed by the road improvements.

It was thought likely at the time, however, that 38BU851-853 would remain intact in the northern section of the project area since the area has received no significant development subsequent to the 1986 study. These are shell

Figure 1. Location of the project on Hilton Head Island in Beaufort County (basemap is USGS South Carolina 1:500,000).

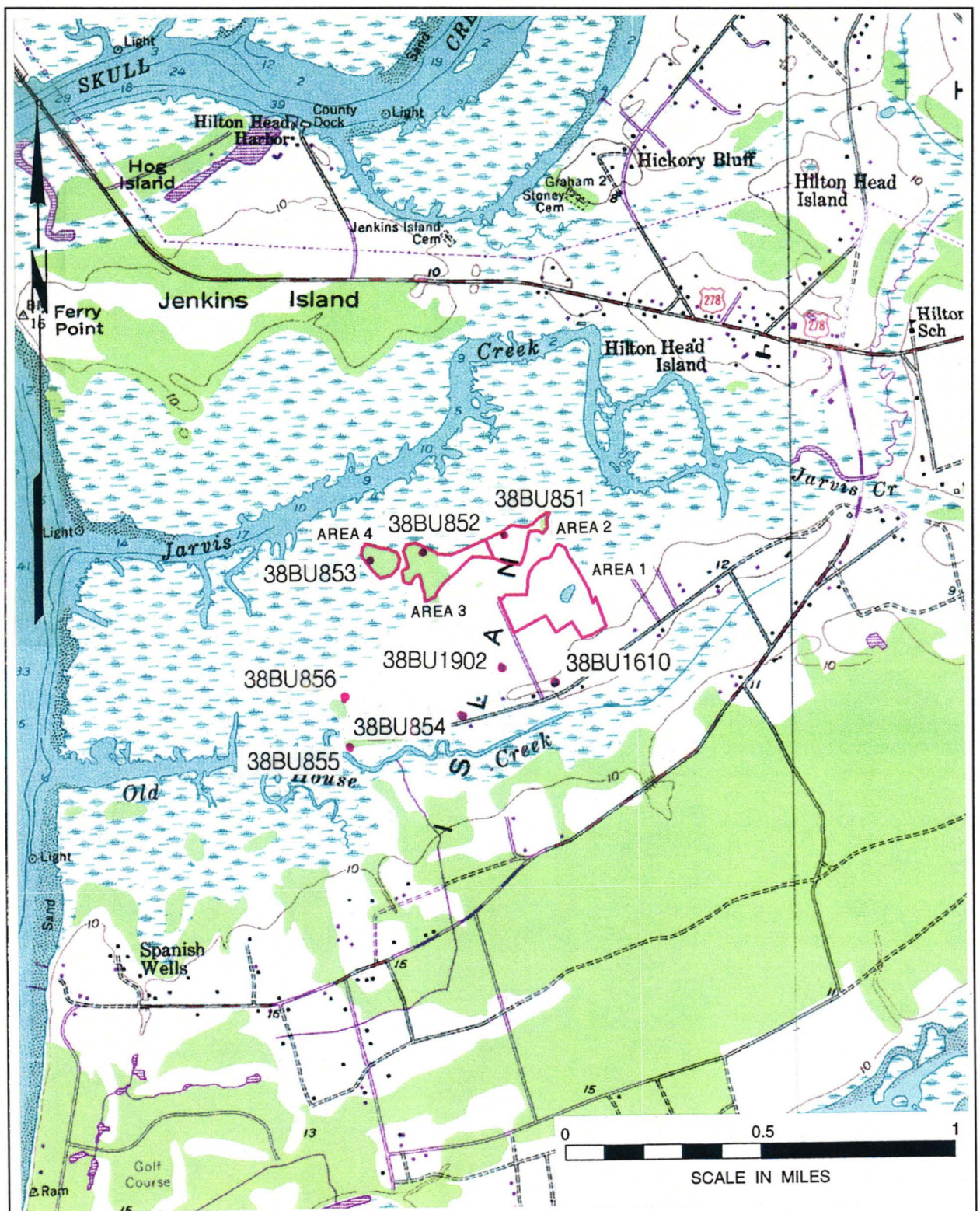

Figure 2. Survey tract with Areas 1-4 and previously identified sites (basemap is USGS Bluffton 1:24,000).

midden sites, with one (38BU853) producing recognizable Deptford pottery.

The previous Jarvis Cove survey (Trinkley 2001) produced one prehistoric site, 38BU1902, which was recommended not eligible for inclusion on the National Register, and two isolated finds, which were likely associated with a nearby modern structure. These two finds were also found not eligible for the National Register.

In addition, the South Carolina Department of Archives and History GIS database was reviewed. There are no National Register of Historic Places buildings, districts, structures, sites, or objects on or within a mile of the project area. Although this database includes the 1998 county-wide architectural survey, that work excluded Hilton Head Island because of its extensive development (Harvey et al. 1998). Consequently, there are no recorded architectural sites within a mile of the proposed subdivision.

We anticipate that the development will involve extensive clearing and grubbing, various soil preparation activities, heavy equipment stagging and movement, construction of underground utilities, both a temporary and long-term increase in traffic on Jonesville Road or other nearby roads, the potential for increased dust levels during construction, and increased noise levels for short durations associated with the various construction activities.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that study.

Physiography

Beaufort County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the south and southeast by the Atlantic Ocean, to the east by St. Helena Sound, to the north and northeast by the Combahee River, to the west by Jasper and Colleton counties and portions of the New and Broad rivers (Figure 1). The mainland primarily consists of nearly level lowlands and low ridges. Elevations range from about sea level to slightly over 100 feet above mean sea level (MSL) (Mathews et al. 1980:134-135). Hilton Head is located between Port Royal Sound to the north and Daufuskie Island to the south. The island is separated from Daufuskie by Calibogue Sound and from the mainland by a narrow band of tidal marsh and Skull Creek. Between Hilton Head and the mainland are several smaller islands, including Pinckney and Jenkins Islands.

Hilton Head is about 11.5 miles in length and has a maximum width of 6.8 miles, incorporating just under 20,000 acres of highland and 2,400 acres of marsh. Elevations range from sea level to 21 feet mean sea level (MSL) at the top of the highest natural beach ridges (Mathews et al. 1980). It is situated in the Sea Island section of South Carolina's Coastal Plain province. The coastal plain consists of the unconsolidated sands, clays, and soft limestones found from the fall line eastward to the Atlantic Ocean, an area of more than 20,000 square miles or about two-thirds of South Carolina (Cooke 1936:1-3). Elevations

Figure 3. Older oaks located on the survey tract.

range from just above sea level on the coast to 600 feet MSL adjacent to the Piedmont province. The coastal plain is drained by three large through-flowing rivers — the Pee Dee, Santee, and Savannah — as well as by numerous smaller rivers and streams. On Hilton Head there are two major drainages, Broad Creek which flows almost due west into Calibogue Sound, and Jarvis Creek which empties into Mackay Creek just north of Broad Creek.

From Bull Bay southward, the coast is atypical of the northern coastline. The area is characterized by low-lying, sandy islands bordered by salt marsh. Brown (1975) classes these islands as either Beach Ridge or Transgressive, with the Transgressive barrier islands being straight, thin pockets of sand which are rapidly retreating landward with erosion rates of up to 1600 feet since 1939. The Beach Ridge barrier islands, however, are more common and consist of islands such as Kiawah and Hilton Head. They are characterized by a bulbous updrift (or northern) end.

Kana (1984) discusses the coastal processes which result in the formation of barrier islands, noting that the system includes tidal inlets at each end of the barrier island with the central part of the island tending to be arcuate in shape while the ends tend to be broken. Hilton Head has the typical central bulge caused by sand wrapping around the tidal delta and then depositing midway down the island. Further, the south end has an accreting spit where sand is building out the shoreline. The central part of the island, however, has experienced a 25 year erosion trend averaging 3 to 10 feet a year (Kana 1984:11-12; see also U.S. Army Corps of Engineers 1971). Research by Hubbard et al. reported that:

> the 25 year trend of the area shows a complex pattern of erosion and deposition along the island's length. Comparison of total volumes of material eroded and deposited along the entire island suggests that sand is not being lost from the island system, but is simply being shifted around from one place to another (Hubbard et al. 1977:23).

More recent work by Kana et al. (1986) confirms considerable shoreline reorientation.

Figure 4. Survey tract showing recent hardwood growth and palmettos.

Hilton Head, however, is also a different shape than most of the other islands since it has a Pleistocene core with a Holocene beach ridge fringe. To understand the significance of this situation, it is important to realize that technically the sea islands and the barrier islands are different from a historical perspective. The classic sea islands of colonial and antebellum fame (such as James, St. Helena, and Sapelo

islands) are erosional remnants of coastal sand bodies deposited during the Pleistocene high sea level stands. They are crudely elongate, parallel to the present day shoreline, and rectangular in outline. Their topography is characterized by gentle slopes, poorly defined ridges and swales, and elevations from 5 to 35 feet MSL. Typical barrier islands include Pawleys, Kiawah, and Hunting islands. Some islands, such as Hilton Head, Daufuskie, and St. Catherines, have an oceanward fringe of beach dune ridges which were constructed during the Holocene high sea level stands (Mathews et al. 1980:65-71; Ziegler 1959). Ziegler (1959:Figure 6) suggests that Hilton Head Island is composed of several sea or erosion remnant islands, joined together by recent Holocene deposits.


Figure 5. Wood bridge connecting Areas 1 and 2.

The project area is situated in the western portion of the island, about 1.5 miles east-northeast of Calibogue Sound, adjacent to the marsh of Jarvis Creek (Figure 2) and north of Old House Creek. Today Old House Creek (which apparently acquired its name after the Civil War and was earlier called Muddy Creek) is recognized as a distinct body of water originating just above Calibogue Sound and flowing southeastwardly, roughly paralleling Jarvis Creek (earlier known as Crooked Creek) to the north and Broad Creek to the south.

The topography in the site area is generally level, although the ground does gently slope down to the marsh edge in the north part of the survey area. Several wetland areas surround the property, including a distinct marsh slough between Areas 1and 2, which is connected by a wooden bridge (Figure 5). As you walk the site, however, there is no real feeling of topographic highs or lows, nor is there any evidence of the dune topography found elsewhere on Hilton Head.

Geology, Soils and Sea Levels

The Sea Island coastal region is covered with sands and clays originally derived from the Appalachian Mountains and which are organized into coastal, fluvial, and aeolian deposits. These deposits were transported to the coast during the Quaternary period and were deposited on bedrock of the Mesozoic Era and Tertiary period. These sedimentary bedrock formations are only occasionally exposed on the coast, although they frequently outcrop along the fall line (Mathews et al. 1980:2). The bedrock in the Beaufort area is below a level of at least 1640 feet (Smith 1933:21).

The Pleistocene sediments are organized into topographically distinct, but lithologically similar terraces parallel to the coast. The terraces have elevations ranging from 215 feet down to sea level. These terraces, representing previous sea floors, were apparently formed at high stands of the fluctuating, although falling, Atlantic Ocean and consist chiefly of sand and clay (Cooke 1936; Smith 1933:29). More recently, research by Colquhoun (1969) has refined the theory of

formation processes, suggesting a more complex origin involving both erosional and depositional processes operating during marine transgressions and regression.

Cooke (1936) identified most of Hilton Head as part of the Pamplico terrace and formation, with a sea level about 25 feet above the present sea level. Colquhoun (1969), however, suggests that Hilton Head is more complex, representing the Princess Anne and Silver Bluff Pleistocene terraces with corresponding sea levels of from 20 to 3 feet. Today the island is usually recognized as Pleistocene with a Holocene fringe.

Another aspect of Sea Island geology to be considered in these discussions is the fluctuation of sea level during the late Pleistocene and Holocene epochs. Prior to 15,000 B.C. there is evidence that a warming trend resulted in the gradual increase in Pleistocene sea levels (DePratter and Howard 1980). Work by Brooks et al. (1989) clearly indicates that there were a number of fluctuations during the Holocene. Their data suggests that from about A.D. 300 through about A.D. 900 the sea level was relatively stable at about 2 feet below current levels. By about A.D. 1000 the level began falling to a low of about 4 feet below modern levels at roughly A.D. 1500. The effect these lower sea levels would have had on the local environment is hard to gauge, although it seems likely that the estuarine complex of the Jarvis and Old House Creek area would have been somewhat reduced. The steeper gradient may have allowed fresh water flow, later eliminated as the gradient was reduced by the rise in sea level to modern stands.

Data from the nineteenth and twentieth centuries suggest that the level is continuing to rise. Kurtz and Wagner (1957:8) report a 0.8 foot rise in Charleston, South Carolina sea levels from 1833 to 1903. Between 1940 and 1950 a sea level rise of 0.34 feet was again recorded at Charleston. These data, however, do not distinguish between sea level rise and land surface submergence.

Within the Sea Islands section of South Carolina the soils are Holocene and Pleistocene in age and were formed from materials that were deposited during the various stages of coastal submergence. The formation of soils in the study area is affected by this parent material (primarily sands and clays), the temperate climate, the various soil organisms, topography, and time.

The mainland soils are Pleistocene in age and tend to have more distinct horizon development and diversity than the younger soils of the Sea Islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The island soils are less diverse and less well developed, frequently lacking a well-defined B horizon. Organic matter is low and the soils tend to be acidic. The Holocene deposits typical of barrier islands and found as a fringe on some sea islands, consist almost entirely of quartz sand which exhibits little organic matter. Tidal marsh soils are Holocene in age and consist of fine sands, clay, and organic matter deposited over older Pleistocene sands. The soils are frequently covered by up to 2 feet of salt water during high tide. These organic soils usually have two distinct layers. The top few inches are subject to aeration as well as leaching and therefore are a dark brown color. The lower levels, however, consist of reduced compounds resulting from decomposition of organic compounds and are black. The pH of these marsh soils is neutral to slightly alkaline (Mathews et al. 1980:39-44).

There are three main soil associations on Hilton Head. The Wando-Seabrook-Seewee association consists of excessively well drained to somewhat poorly drained sands found on the interior. The Fripp-Baratari association consists of excessively drained and poorly drained sands found along the Atlantic shore of the island. The Bohicket-Capers-Handsboro association consists of very poorly drained mineral and organic marsh soils (Stuck 1980).

The soils in the immediate vicinity of the study tract consist of moderately well drained, rapidly permeable Seabrook Series soils that formed in thick sandy Coastal Plain sediment (Stuck 1980:Map 99). These soils often have an Ap horizon of dark grayish-brown (10YR4/2) fine sand up to 0.8 foot in depth overlying a C1 horizon of light yellowish-brown (10YR6/4) fine sand to a depth of 2.3 feet.

Also found around the area are Capers soils which have a surface layer of very dark gray (10YR3/1) to a depth of 0.6 foot over a dark gray (10YR4/1) clay loam to a depth of up to 1.8 feet.

Less abundant around this portion of the survey area are Wando fine sands with an Ap horizon of dark brown (10YR4/3) fine sand to a depth of 0.8 foot over a brown (10YR5/3) fine sand up to a depth of 1.6 feet and Ridgeland soils which consist of an Ap horizon of very dark gray (10YR3/1) fine sand to a depth of 0.7 foot over a dark reddish-brown (5YR3/2) fine sand to a depth of 1.3 feet. Below these soils is a very pale brown (10YR7/4) fine sand.

Climate

The major climatic controls of the area are today the latitude, elevation, distance from the ocean, and location with respect to the average tracks of migratory cyclones. Hilton Head's latitude of about 32° 13' N places it on the edge of the balmy subtropical climate typical of Florida. As a result, there are relatively short, mild winters and long, warm, humid summers. The large amount of nearby warm ocean water surface produces a marine climate, which tends to moderate both the cold and hot weather. The Appalachian Mountains, about 220 miles to the northwest, block shallow cold air masses from the northwest, moderating them before they reach the sea islands (Landers 1970:2-3; Mathews et al. 1980:46).

During the eighteenth century the Carolina low country was described as a paradise, but by the middle of the century South Carolinians had begun to reappraise their environment. A proverb current in England was "They who want to die quickly, go to Carolina," and a German visitor told his readers that "Carolina is in the spring a paradise, in the summer a hell, and in the autumn a hospital" (quoted in Merrens and Terry 1984:5-49).

In modern times the maximum daily temperatures in the summer tend to be near or above 90°F and the minimum daily temperatures tend to be about 68°F. The summer water temperatures average 83°F. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer. Winter has average daily maximum and minimum temperatures of 63°F and 38°F respectively. Precipitation is in the forms of rain associated with fronts and cyclones; snow is uncommon (Janiskee and Bell 1980:1-2). The wind shifts from the north-northeast in the fall to the west in the winter. By the late spring it has again shifted to the south and south-southwest.

The average yearly precipitation is 49.4 inches, with 34 inches occurring from April through October, the growing season for most sea island crops. Hilton Head Island has approximately 285 frost free days annually (Janiskee and Bell 1980:1; Landers 1970). This mild climate, as Hilliard (1984:13) notes, is largely responsible for the presence of many historic southern crops, such as cotton.

Floristics

Küchler (1964) identifies the natural potential vegetation of the Hilton Head area as primarily Live Oak-Sea Oats, although areas of Oak-Hickory-Pine also existed, especially for areas not dominated by the salt-spray. The physiognomy of the Live Oak-Sea Oats region would have been irregular, varying from open grasslands to dense shrubby areas and groves of low broadleaf evergreen trees (primarily live oaks). In contrast, the Oak-Hickory-Pine area consisted of medium tall to tall forests of broadleaf deciduous and needleleaf evergreen trees. It should be stressed that Küchler's forests represent what would "exist today if man were removed from the scene and if the resulting plant succession were telescoped into a single moment" (Küchler 1964:2).

This characterization is useful, of course, only if we assume that the influence of man on the vegetation up until this time has been minimal, since the determination of natural vegetation allows man's earlier activities to stand intact (Küchler 1964:2). Such a concept, while approximating the forest type present immediately prior to the arrival of European explorers, provides increasingly less secure reconstructions the further one pushes into the prehistoric past. While it is impossible with this data to reconstruct the


Figure 6. Pine forest on survey tract.

local forest environment of the project area, it is possible to place the site more securely in a broad environmental framework.

Hilton Head today exhibits four major ecosystems: the coastal marine ecosystem where land has unobstructed access to the ocean, the maritime ecosystem which consists of the upland forest area of the island, the estuarine ecosystem of deep water tidal habitats, and the palustrine ecosystem which consists of essentially fresh water, non-tidal wetlands (Sandifer et al. 1980:7-9).

Mathews et al. (1980) suggest that the most significant ecosystem on Hilton Head is the maritime forest community. This maritime ecosystem is defined most simply as all upland areas located on barrier islands, limited on the ocean side by tidal marshes. On sea islands the distinction between the maritime forest community and an upland ecosystem (essentially found on the mainland) becomes blurred. Sandifer et al. (1980:108-109) define four subsystems, including the sand spits and bars, dunes, transition shrub, and maritime forest. Of these, only the maritime forest subsystem is likely to have been significant to the prehistoric and historic occupants and only it will be further discussed. While this subsystem is frequently characterized by the dominance of live oak and the presence of salt spray, these are less noticeable on the sea islands than they are on the narrower barrier islands (Sandifer et al. 1980:120).

The barrier islands may contain communities of oak-pine, oak-palmetto-pine, oak-magnolia, palmetto, or low oak woods. The sea islands, being more mesic or xeric, tend to evidence old field communities, pine-mixed hardwoods communities, pine forest communities, or mixed hardwood communities (Sandifer et al. 1980:120-121, 437).

Several areas of Hilton Head evidence upland mesic hardwood communities, also known as "oak-hickory forests" (Braun 1950:297). These forests contain significant quantities of mockernut hickories as well as pignut hickory, species which even today are still present in the immediate area. Most parts of the pre-modern island, however, are more likely to be classified as Braun's (1950:284-289) pine or pine-oak forest. These are typically found on sandy, well to excessively drained soils which have relatively little accumulated organic material. Major constituents include live oak, laurel oak, water oak, and loblolly pine. Wenger (1968) notes that the presence of loblolly and shortleaf pines is common on coastal plain sites where they are a significant sub-climax aspect of the plant succession toward a hardwood climax.

Understory species consist mainly of the canopy species, although sweetgun and red bay may be found on the lower elevations while sassafras is common throughout the area. Vines include catbriar, cross vine, summer grape,

Figure 7. Open field in western portion of survey tract.

Virginia creeper, poison ivy, and occasionally blackberry. The shrub layer is influenced by the amount of sunlight reaching the forest floor, with open canopy and disturbed areas dominated by saw palmetto, wax myrtle, chinquapin, and yaupon. Like the shrub layer the herbaceous layer is dependent on the amount of light reaching it. Consequently, disturbed ground areas (such as those affected by humans) are often characterized by broomstraw, goldenrod, partridge pea, polkweed, ragweed, and dog fennel.

The estuarine ecosystem in the Hilton Head vicinity includes those areas of deep-water tidal habitats and adjacent tidal wetlands. Salinity may range from 0.5 ppt at the head of an estuary to 30 ppt where it comes in contact with the ocean. Estuarine systems are influenced by ocean tides, precipitation, fresh water runoff from the upland areas, evaporation, and wind. The tidal range for Hilton Head Island is 6.6 to 7.8 feet, indicative of an area swept by moderately strong tidal currents. The system may be subdivided into two major components: subtidal and intertidal (Sandifer et al. 1980:158-159). These estuarine systems are extremely important to our understanding of prehistoric occupation because they naturally contain such high biomass (Thompson 1972:9). The estuarine area contributes vascular flora used for basket making, as well as mammals, birds, fish (over 107 species), and shellfish.

The last environment to be briefly discussed is the freshwater palustrine ecosystem, which includes all wetland systems, such as swamps, bays, savannas, pocosins and creeks, where the salinities measure less than 0.5 ppt. The palustrine ecosystem is diverse, although not well studied (Sandifer et al. 1980:295). A number of forest types are found in the palustrine areas which attract a variety of terrestrial mammals. On Hilton Head the typical vegetation consists of red maple, swamp tupelo, sweet gum, red bay, cypress, and various hollies. Also found are wading birds and reptiles. It seems likely that these freshwater environs were of particular importance to the prehistoric occupants, but probably of limited importance to historic occupants (who tended to describe them in the nineteenth century as "impenetrable swamps").

The nearest freshwater resource for the immediate area may have been Jarvis Creek, north of the survey area. Otherwise, there are accounts of digging wells on the island to obtain near surface, and generally unpalatable, water.

PREHISTORIC AND HISTORIC SYNTHESIS

There have been a number of studies prepared for the Beaufort area, and Derting et al. (1991:47-77) list 225 in their bibliography of South Carolina archaeology. Previous work in the immediate area includes a reconnaissance survey of the coastal portions of Hilton Head Island (Trinkley 1987), as well as detailed data recovery excavations at a serie of shell middens on Old House Creek (Trinkley and Adams 1994). A general prehistoric chronology for the region is provided in Figure 8.

For the historic period there are an equal number of studies that provide broad overviews. Harvey and his colleagues provide a general view of Beaufort County, although no information is provided on Hilton Head Island (Harvey et al. 1998). While not as detailed as it might be, Holmgren (1959) provides an excellent introduction to the history of Hilton Head. It has been supplemented by a variety of plantation or area specific studies, such as the work at the freedmen village of Mitchelville (Trinkley 1986), the examination of a portion of Cotton Hope Plantation (Trinkley 1990), the excavations at Seabrook Plantation (Campo et al. 1998) or the series of studies on the Stoney/Baynard plantation (Adams and Trinkley 1991, Adams et al. 1995, Trinkley 1996).

Prehistoric Synthesis

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Goodyear et al. 1989; Michie 1977; Williams 1968). The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Sea level during much of this period is expected to have been as much as 65 feet lower than present, so many sites may be inundated (Flint 1971). Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coast. Archaic period assemblages are rare in the Sea Island region, although the sea level is anticipated to have been within 13 feet of its present stand by the beginning of the succeeding Woodland period (Lepionka et al. 1983:10). Brooks and Scurry note that:

> Archaic period sites, when contrasted with the subsequent Woodland period, are typically small, relatively few in number and contain low densities of archaeological material. The data may indicate that the inter-riverine zone was utilized by Archaic populations characterized by small group size, high mobility, and wide ranging exploitative patterns (Brooks and Scurry 1978:44).

Alternatively, the general sparsity of Archaic sites in the coastal zone may be the result of a more

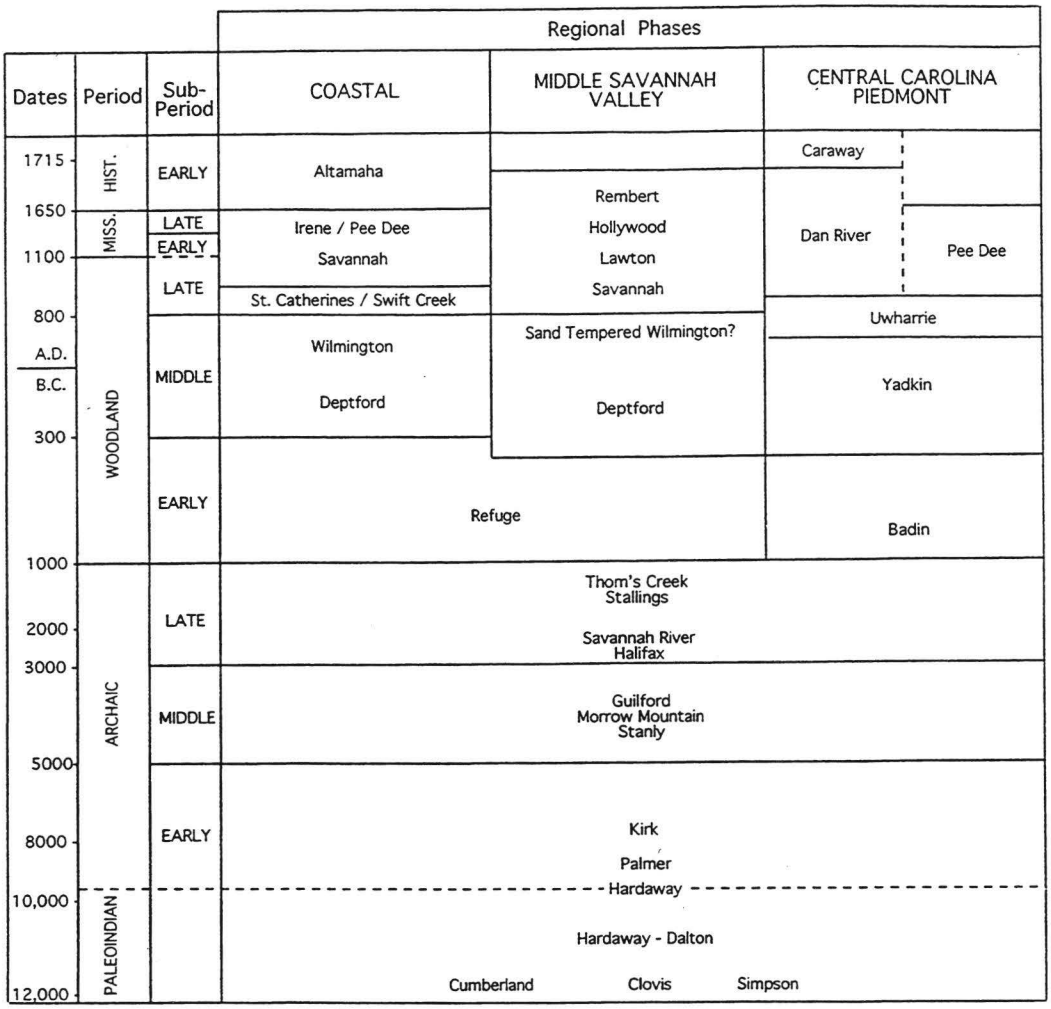

Figure 8. Generalized culture periods and chronology for different regions of South Carolina.

attractive environment inland adjacent to the floodplain swamps of major drainages. Of course, this is not necessarily an alternative explanation, since coastal Archaic sites may represent only a small segment in the total settlement system.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow

Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of the Appalachian Mountains, such as the work in the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) pottery. The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland, sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1976). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with

the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1990:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural

disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

Historic Synopsis

The British Proprietory Period

British influence in the New World began in the fifteenth century with the Cabot voyages, but the southern coast did not attract serious attention until King Charles II granted Carolina to the Lords Proprietors in 1663. In August 1663 William Hilton sailed from Barbados to explore the Carolina territory, spending a great deal of time in the Port Royal area (Holmgren 1959). Almost chosen for the first English colony, Hilton Head Island was passed over by Sir John Yeamans in favor of the more protected Charles Town site on the west bank of the Ashley River in 1670 (Clowse 1971:23-24; Holmgren 1959:39).

Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system, which was designed to profit the mother country by providing raw materials unavailable in England (Clowse 1971). Charleston was settled by English citizens, including a number from Barbados, and by Huguenot refugees. Black slaves were brought directly from Africa, as well as Barbados.

The Charleston settlement was moved from the mouth of the Ashley River to the junction of the Ashley and Cooper Rivers in 1680, but the colony was a thorough disappointment to the Proprietors. It failed to grow as expected, did not return the anticipated profit, and failed to evidence workable local government (Ferris 1968:124-125). The early economy was based almost exclusively on Indian trade, naval stores, lumber, and cattle. Rice began emerging as a money crop in the late seventeenth century, but did not markedly improve the economic well-being of the colony until the eighteenth century (Clowse 1971).

Meanwhile, Scottish Covenanters under Lord Cardross established Stuart's Town on Scot's Island (Port Royal) in 1684, where it existed for four years until destroyed by the Spanish. It was not until 1698 that the area was again occupied by the English. Both John Stuart and Major Robert Daniell took possession of lands on St. Helena and Port Royal islands. The town of Beaufort was founded in 1711 although it was not immediately settled.

While most of the Beaufort Indian groups were persuaded to move to Polawana Island in 1712, the Yemassee, part of the Creek Confederacy, revolted in 1715. By 1718 the Yemassee were defeated and forced southward to Spanish protection. Consequently, the Beaufort area, known as St. Helena Parish, Granville County, was for the first time relatively safe from both the Spanish and the Indians. The Yemassee, however, continued occasional raids into South Carolina, such as the 1728 destruction of the Passage Fort at Bloody Point on Daufuskie Island (Starr 1984:16). In the same year the English raid on St. Augustine succeeded in breaking the Spanish influence and the remnant Indian groups made peace with the English. The results for the Beaufort area, however, were mixed. While there was a semblance of peace, frontier settlements were largely deserted, population growth was slow, and the Indian trade was diverted from Beaufort to Savannah.

The British Colonial Period

Although peace marked the Carolina colony, the Proprietors continued to have disputes with the populace, primarily over the colony's economic stagnation and deterioration. In 1727 the colony's government virtually broke down when the Council and the Commons were unable to agree on legislation to provide more bills of credit (Clowse 1971:238). This, coupled with the disastrous depression of 1728, brought the colony to the brink of mob violence. Clowse notes that the "initial step toward aiding South Carolina came when the proprietors were eliminated" in 1720 (Clowse 1971:241).

While South Carolina's economic woes

were far from solved by this transfer, the Crown's Board of Trade began taking steps to remedy many of the problems. A new naval store law was passed in 1729 with possible advantages accruing to South Carolina. In 1730 the Parliament opened Carolina rice trade with markets in Spain and Portugal. The Board of Trade also dealt with the problem of the colony's financial solvency (Clowse 1971:245-247). Clowse notes that these changes, coupled with new land policies, "allowed the colony to go into an era of unprecedented expansion" (Clowse 1971:249). South Carolina's position was buttressed by the settlement of Georgia in 1733.

By 1730 the colony's population had risen to about 30,000 individuals, 20,000 of whom were black slaves (Clowse 1971:Table 1). The majority of these slaves were used in South Carolina's expanding rice industry. In the 1730 harvest year 48,155 barrels of rice were reported, up 15,771 barrels or 33% from the previous year (Clowse 1971:Table 3). Although rice was grown in the Beaufort area, it did not become a major crop in South Carolina until after the Revolutionary War. Rice was never a significant crop on the Beaufort Sea Islands, where ranch farming was favored because of its economic returns and favorable climate (Starr 1984:26-27). Elsewhere, however, rice monoculture shaped the social, political, and economic systems which produced and perpetuated the coastal plantation system prior to the rise of cotton culture.

Although indigo was known in the Carolina colony as early as 1669 and was being planted the following year, it was not until the 1740s that it became a major cash crop (Huneycutt 1949). While indigo was difficult to process, its success was partially due to it being complementary to rice. Huneycutt notes that planters were "able to 'dovetail' the work season of the two crops so that a single gang of slaves could cultivate both staples" (Huneycutt 1949:18). Indigo continued to be the main cash crop of South Carolina until the Revolutionary War fatally disrupted the industry.

During the Revolutionary War the British occupied Charleston for over two and one-half years (1780-1782). A post was established in Beaufort to coordinate forays into the inland waterways after Prevost's retreat from the Battle of Stono Ferry (Federal Writer's Project 1938:7; Rowland 1978:288). British earthworks were established around Port Royal and on Ladys Island (Rowland 1978:290). The removal of the royal bounties on rice, indigo, and naval stores caused considerable economic chaos during and after the war with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

The Antebellum Period

While freed of Britain and her mercantilism, the new United States found its economy thoroughly disrupted. There was no longer a bounty on indigo, and in fact Britain encouraged competition from the British and French West Indies and India "to embarrass her former colonies" (Huneycutt 1949:44). As a consequence the economy shifted to tidewater rice production and cotton agriculture. Lepionka notes that "long staple cotton of the Sea Islands was of far higher value than the common variety (60 cents a pound compared to 15 cents a pound in the late 1830s) and this became the major cash crop of the coastal islands" (Lepionka et al. 1983:20). It was cotton, in the Beaufort area, that brought a full establishment of the plantation economy. Lepionka concisely states that:

> [t]he cities of Charleston and Savannah and numerous smaller towns such as Beaufort and Georgetown were supported in their considerable splendor on this wealth . . . . An aristocratic planter class was created, but was based on the essential labor of black slavery without which the plantation economy could not function. Consequently, the demographic pattern of a black majority first established in colonial times was reinforced (Lepionka et al. 1983:21).

Mills, in 1826, provides a thorough commentary on the Beaufort District noting that:

> Beaufort is admirably situated for commerce, possessing one of

> the finest ports and spacious harbors in the world . . . . There is no district in the state, either better watered, of more extended navigation, or possessing a larger portion of rich land, than Beaufort: more than one half of the territory is rich swamp land, capable of being improved so as to yield abundantly (Mills 1972 [1826]:367).

Describing the Beaufort islands, Mills comments that they were "beautiful to the eye, rich in production, and withal salubrious" (Mills 1972 [1826]:372). Land prices ranged from $60 an acre for the best, $30 for "second quality," and as low as 25 cents for the "inferior" lands. Grain and sugarcane were cultivated in small quantities for home use while:

> [t]he principal attention of the planter is . . . devoted to the cultivation of cotton and rice, especially the former. The sea islands, or salt water lands, yield cotton of the finest staple, which commands the highest price in market; it has been no uncommon circumstance for such cotton to bring $1 a pound. In favorable seasons, or particular spots, nearly 300 weight has been raised from an acre, and an active field hand can cultivate upwards of four acres, exclusive of one acre and half of corn and ground provisions (Mills 1972 [1826]:368).

Reference to the 1860 agricultural census reveals that of the 891,228 acres of farmland, 274,015 (30.7%) were improved. In contrast, only 28% of the State's total farmland was improved, and only 17% of the neighboring Colleton District's farm land was improved. Even in wealthy Charleston District only 17.8% of the farm land was improved (Kennedy 1864:128-129). The cash value of Beaufort farms was $9,900,652, while the state average by county was only $4,655,083. The value of Beaufort farms was greater than any other district in the state for that year, and only Georgetown listed a greater cash value of farming implements and machinery (perhaps reflecting the more specialized equipment needed for rice production).

The record of wealth and prosperity, such as it was, is tempered by the realization that it was based on the racial imbalance typical of Southern slavery. In 1820 there were 32,199 people enumerated in Beaufort District, 84.9% of whom were black (Mills 1972 [1826]:372). While the 1850 population had risen to 38,805, the racial breakdown had changed little, with 84.7% being black (83.2% were slaves). Thus, while the statewide ratio of free white to black slave was 1:1.4, the Beaufort ratio was 1:5.4 (DeBow 1853:338).

Civil War and the Postbellum

Hilton Head Island fell to Union forces on November 7, 1861 and was occupied by the Expeditionary Corps under the direction of General T.W. Sherman. Beaufort, deserted by the Confederate troops and the white towns-people, was occupied by the Union forces several weeks later. A single white person, who remained loyal to the Federal government, was found on Ladys Island (Johnson 1969:189). Hilton Head became the Headquarters for the Department of the South and served as the staging area for a variety of military campaigns. A brief sketch of this period, generally accurate, is provided by Carse (1981). As a result of Hilton Head and Beaufort's early occupation by Union forces, all of the plantations fell to military occupation, a large number of blacks flocked to the area, and a "Department of Experiments" was born. An excellent account of the "Port Royal Experiment" is provided by Rose (1964), while the land policies on St. Helena are explored by McGuire (1985).

Trinkley (1986) has examined the freedmen village of Mitchelville on Hilton Head Island. One result of the Mitchelville work was to document how little is actually known about the black heritage and postbellum history of the sea islands. Even the social research spearheaded by

the University of North Carolina's Institute for Research in Social Science at Chapel Hill in the early twentieth century (e.g. Johnson 1969, Woofter 1930) failed to record much of the activities on islands such as Hilton Head.

McGuire (1982, 1985) provides a detailed account of the land policies in the area during the Civil War and her studies should be consulted for detailed information. In general, however, blacks slowly came to own a large proportion of the available land. Certificates of possession were eventually issued for a number of the sea island plantations (McGuire 1982:36). During the postbellum period previous owners slowly came forward to reclaim, or redeem, land confiscated by the Federal government. The 1872 redemption process was not totally successful, partially because some tracts had such low value. By the 1890s a program was established to provide owners unsuccessful at either restoration or redemption with token compensation (McGuire 1982:77; S.C. Department of Archives and History, Secretary of State Records, Beaufort County Tax Claims, Direct Tax Compensation Book IX/2/4/3B).

During the late nineteenth century most of the sea island plantations continued as a rural, isolated agrarian communities. The new plantation owners attempted to forge an economic relationship with the free black laborers and found a multitude of problems, including the need to pay higher wages, increasing problems with the cotton boll weevil, and decreasing fertility. The letters of G.C. Hardy, the manager of the Eustis Plantation on Ladys Island in the 1870s, clearly reveal the problems faced during this period. Hardy, in his letters to Frederic Eustis, discusses the rising labor costs and the serious losses of cotton to the boll weevil (South Caroliniana Library, Frederic A. Eustis Collection).

In the 1870s a new form of livelihood was introduced — the mining of phosphate for fertilizer. While both land and river rock mining were conducted in South Carolina, the Beaufort area saw primarily river dredging to acquire the phosphate ore present as gravel, although land mining of phosphate nodules also took place (Mathews et al. 1980:27, 31). As the industry began to decline in the early twentieth century, blacks returned to agriculture and oyster factories.

Woofter (1930) provides information on the agricultural practices of the St. Helena blacks in the early twentieth century, noting that the population was largely stable, with most blacks remaining in the vicinity of their parents' "home" plantations (Woofter 1930:265). While islands, such as St. Helena, which were large and easily

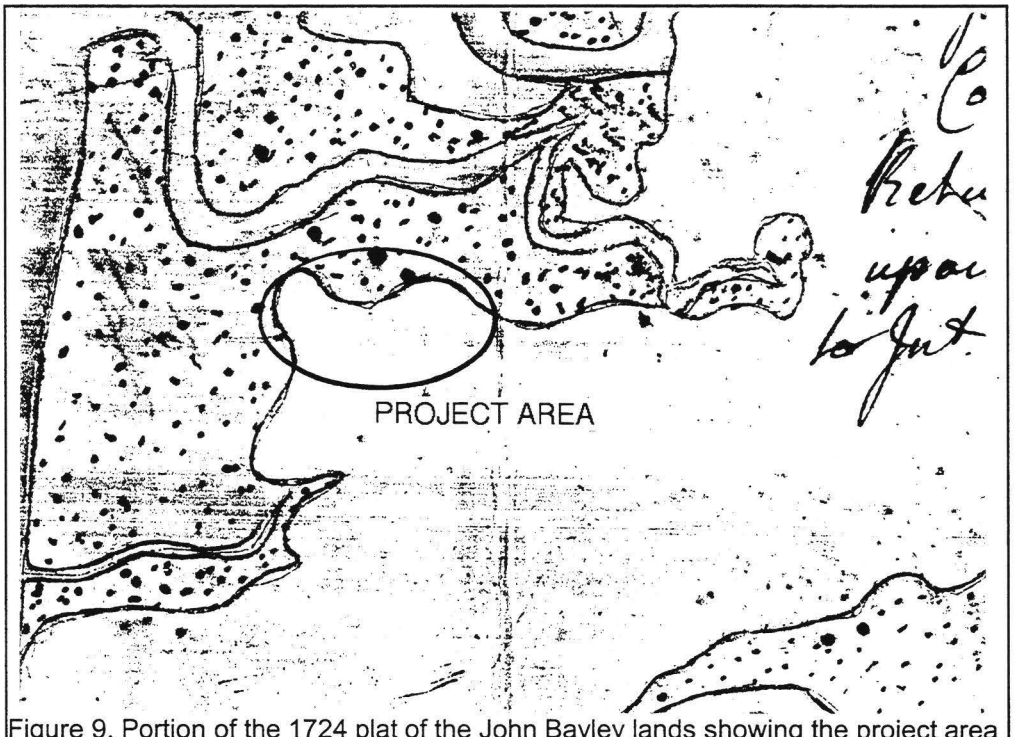

Figure 9. Portion of the 1724 plat of the John Bayley lands showing the project area (S.C. Department of Archives and History, South Carolina Map Collection).

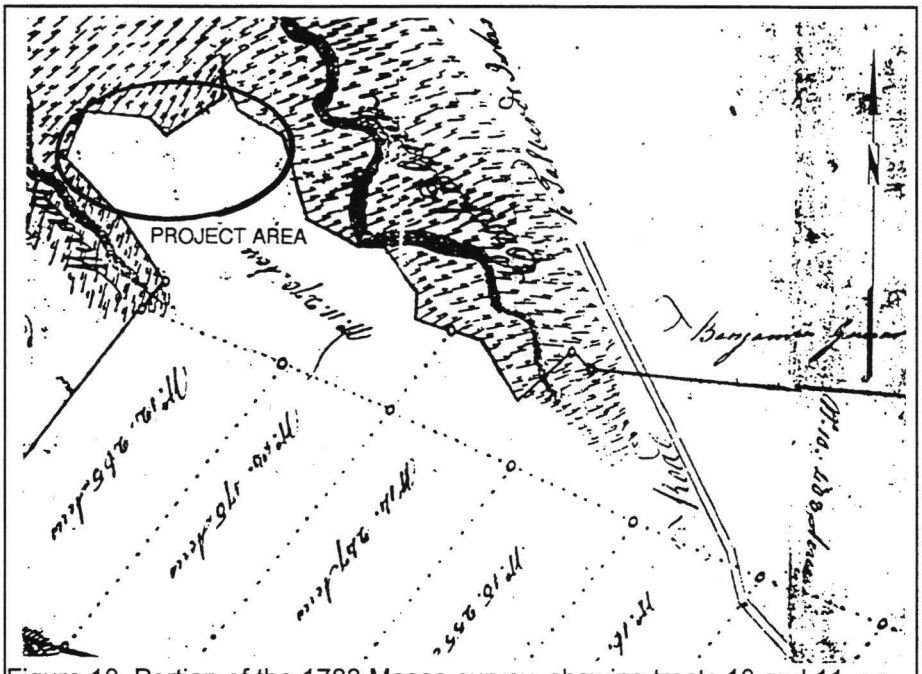

Figure 10. Portion of the 1783 Mosse survey, showing tracts 10 and 11, as well as the survey area.

accessible began to change more rapidly during this period, the smaller, more isolated islands, such as Hilton Head, maintained very clear connections with the past which have been repeatedly documented through oral histories.

Historic Synthesis of the Project Area

Because of the small tract size, no primary historic research was conducted for this survey beyond the examination of period maps. Nevertheless, it is possible to generally document ownership and land history activities for the parcel.

Perhaps the earliest plat of the property is the 1724 map of John Bayley's 16,000 acres on Trench's (or Hilton Head) Island. The plat (Figure 9), surprisingly accurate for the period, fails to reveal any activity on the study parcel.

Holmgren (1959:128-129) provides a general chain of title for Honey Horn Plantation, noting that the property is shown as tracts 10 and 11, encom-passing 473 acres, on Mosse's 1783 survey of the Bailey property after the Revolutionary War (Figure 10).

In 1792 John Hanahan, an Edisto Island planter, leased tract 11 (Charleston County RMC, DB G6, pg. 490). By the turn of the nineteenth century he had also acquired tract 10, combining

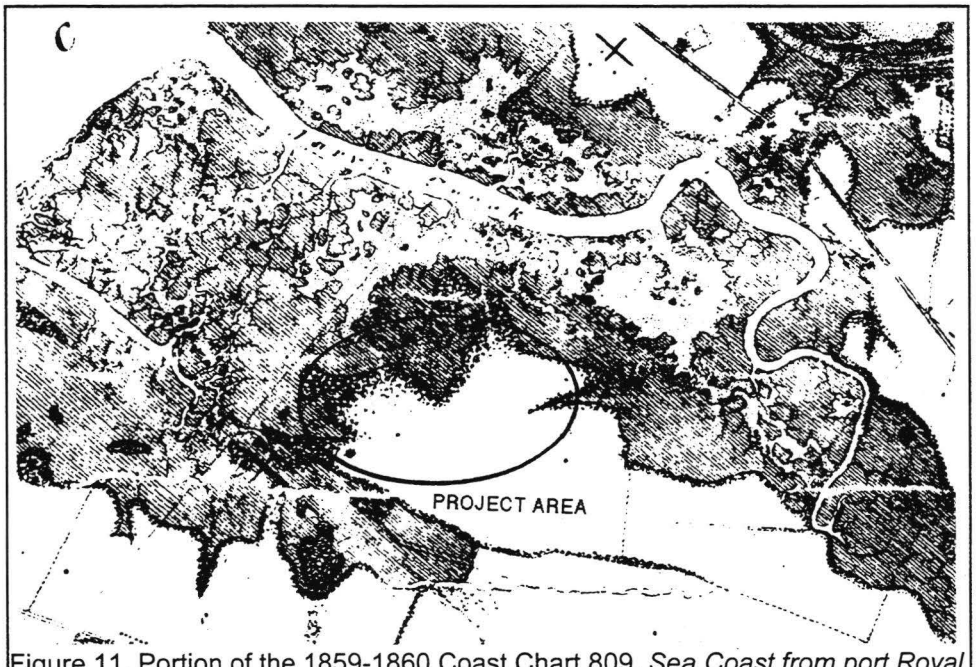

Figure 11. Portion of the 1859-1860 Coast Chart 809, *Sea Coast from port Royal to the Mouth of the May River*, showing the project area.

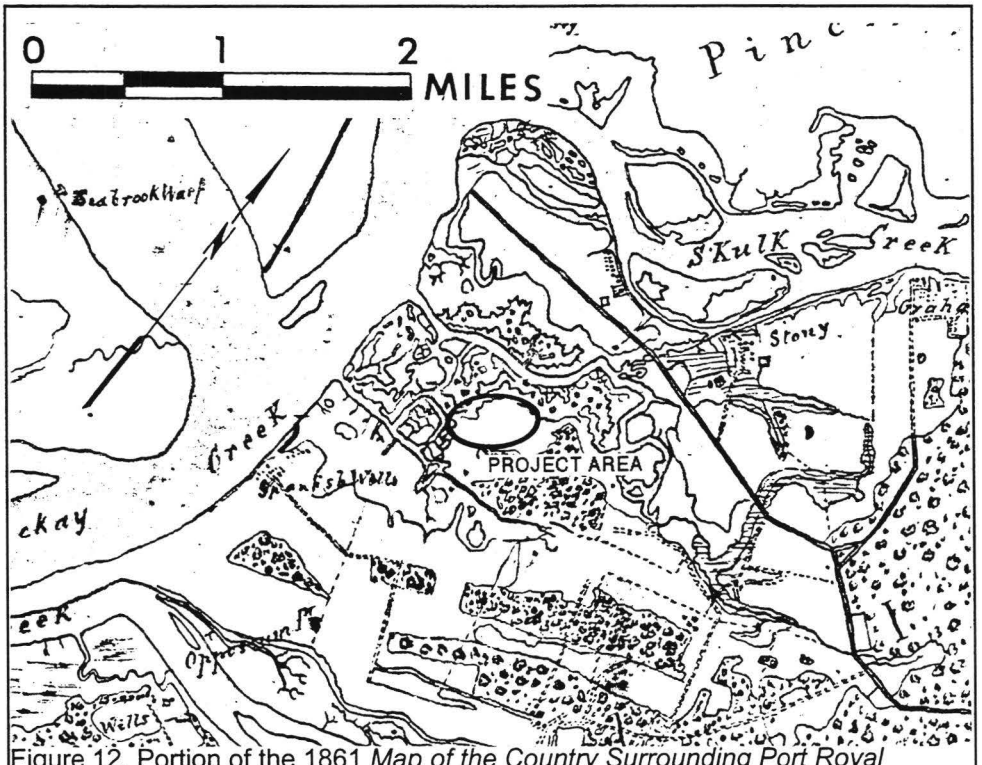

Figure 12. Portion of the 1861 *Map of the Country Surrounding Port Royal Compiled for Brigt. General T.W. Sherman*, showing the project area.

the two into a sizeable plantation (Johnson 1989:119). Holmgren suggests that the name Honey Horn came about through the "simple process of misspelling and mispronouncing plain Hanahan" (Holmgren 1959:65).

At Hanahan's death in 1804 the property was sold to James and John Stoney (Charleston County RMC, DB C9, pg. 179). It was during this same transaction that the Stoney brothers also acquired a number of other lands on Hilton Head. It has been suggested that they were engaged in land and slave speculation, perhaps with the goal of James Stoney operating the plantations, with John handling the factorage of the cotton. Regardless, it appears that their venture ended in disaster.

James Stoney died in 1827 and John died in 1838. During the following several years a series of court cases evolved from the indebtedness of the estate and its inability to satisfy all of its creditors (Adams and Trinkley 1991:23). It would have been around this time when the plantation was acquired by William J. Graham, who already owned a large plantation at Grahamville (Holmgren 1959:128; Rowland et al. 1996:384-385). It has been speculated that it was Graham who constructed the current Honey Horn Plantation structure, with Holmgren commenting that the house was only partially complete when the island fell to Union forces in 1861 (the basis for this is unclear).

The 1850 Agricultural Census reveals that Graham's farm implements were valued at $200. The plantation produced 900 bushels of corn, 300 bushels of oats, 300 bushels of peas or beans, 2,000 bushels of sweet potatoes, and 650 pounds of butter. More importantly, the plantation produced 15 bales of cotton and 94,000 pounds of rice.

The 1856 tax returns for Graham reveal that he owned 76 African American slaves and planted 300 acres of improved land, with an additional 400 acres classified as unimproved (SC Department of Archives and History, Secretary of State, St. Lukes Parish Tax Return, 1856). He also paid taxes on one horse, three mules, 30 milk cows, 16 oxen, 30 steers, 10 sheep, and 40 pigs.

The 1860 census provides no information. Johnson notes that while Graham is listed, no data are provided and there is a margin note, "off." He interprets this to mean that anticipating the Civil War he had already departed this island (Johnson 1989:128). It seems more likely that as an absentee owner he just wasn't available and the census taker wasn't able to find an overseer.

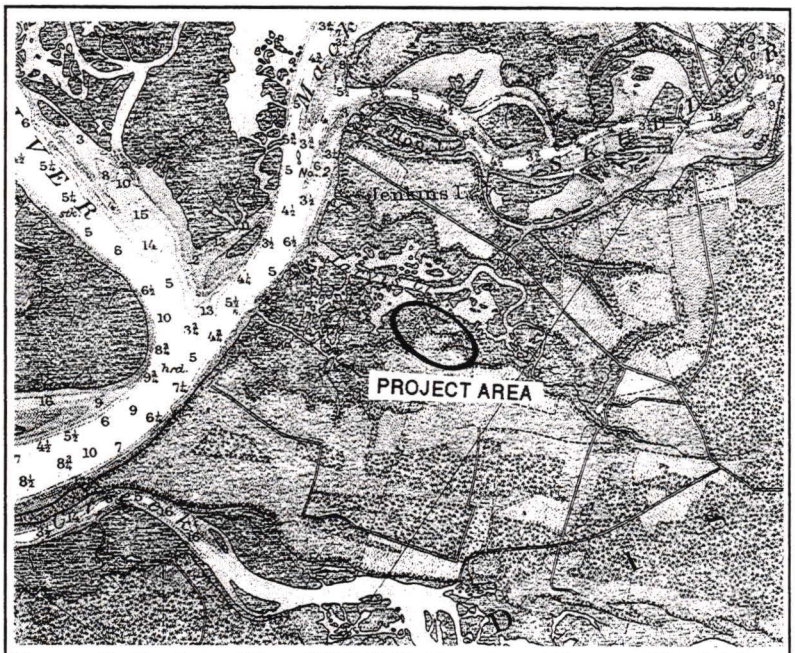

Figure 13. Portion of the 1873 U.S. Coast and Survey Chart 55, showing the project area.

Coast Chart 809 provides a view of Honey Horn Plantation in 1859-1860. The main plantation is well illustrated, as is the large area of cultivated land to the west of the plantation complex. This chart also reveals that Old House Creek had been dammed, creating an area suitable for rice cultivation (Figure 11). This dam was probably in the area due south of the study tract. The chart also reveals that the study area, including what is today considered marsh, was entirely cultivated.

There are several brief accounts of the Graham plantation in Civil War accounts. For example, Copp notes that:

> The Colonel and staff occupied the mansion house .... The company having tents not far from the house. There was something over 100 Negroes left on this plantation who were cultivating land for their own support, raising some cotton, but more sweet potatoes and corn and peanuts, and selling their products to the soldiers (Copp 1911:169).

Like other plantations on Hilton Head, Honey Horn was confiscated by the Federal Government (Beaufort County RMC, DB 7, pg. 170). The plantation was sold to Freeman Dodd in December 1863. Dodd, was almost certainly a land speculator and he held the tract for only three months before selling to Ramon DeRivas of New York City (Beaufort County RMC, DB 7, pg. 170).

An 1861 map of the area suggests that a large portion of previously planted land, including the study tract, had grown up in woods (Figure 12). This may be an error on the part of the Union troops making the map or it may reflect that the land was taken out of cultivation because of its age or condition.

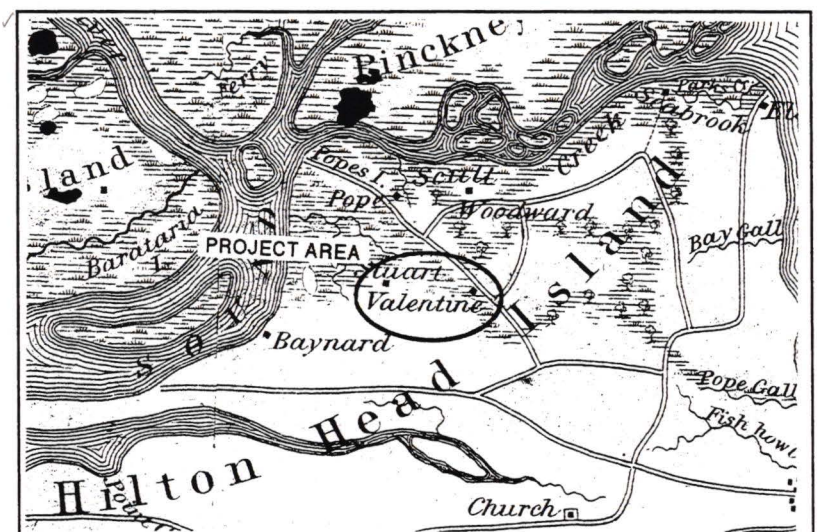

Figure 14. Portion of the 1877 *Map Showing the Location of the Lands of the South Carolina Land and Improvement Company*, showing the project area owned by the Valentines.

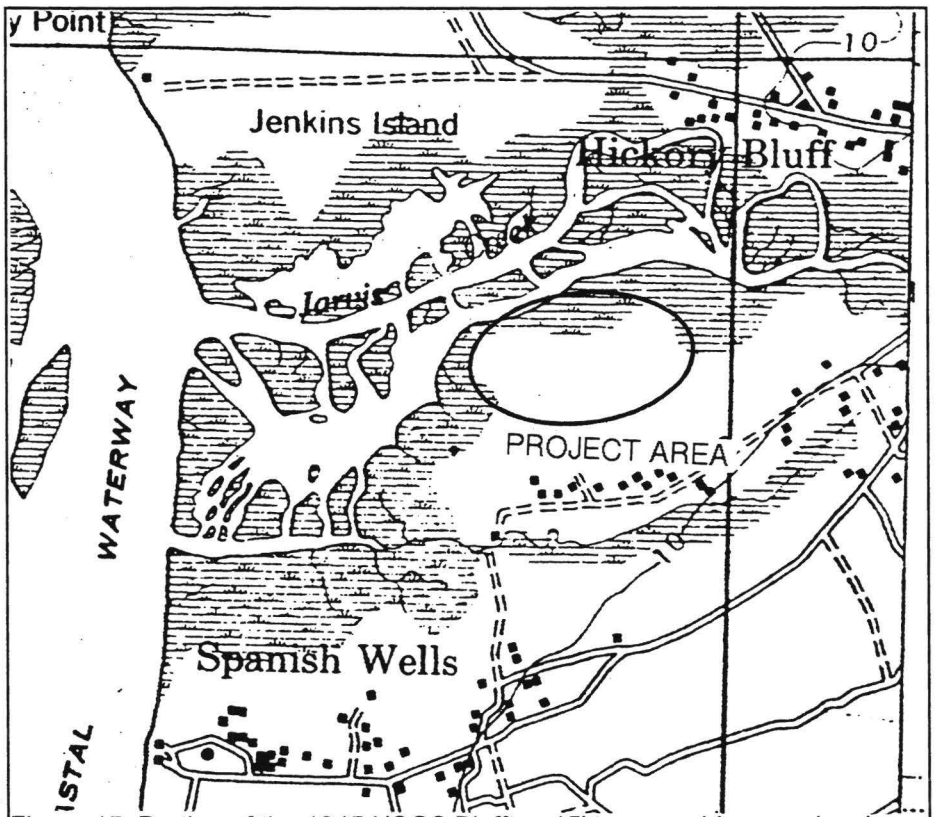

Figure 15. Portion of the 1945 USGS Bluffton 15' topographic map showing the project area and the Jonesville community.

Holmgren (1959:128) comments that at least some portions of the property were transferred from DeRivas to Tomas Quinteres and

Rafael Alvarez with Ana and Robustrand Hergues reuniting the Honey Horn property just a few years later. Not only were their efforts to profitably grow cotton were doomed, but they also lost a child. Holmgren reports that "a coffin marked 'Remains of M. Hergues' [was] found in the Baynard vault in Zion church yard" (Holmgren 1959:108).

In 1870 they sold the property to Edward and Eugenia Valentine (Figures 13 and 14) . Edward Valentine, another New Yorker, acquired the property for his Southern bride (Holmgren 1959:116) and apparently planted the property for nearly two decades. Figure 13, for example, shows the tract as no longer wooded; there is a large pasture on the western half of the plantation and a large field on the eastern half. The dam across Old House Creek was still in place, with a small field just to the north. This map shows the Honey Horn settlement and even the slave row still in good condition.

In 1884, however, the Valentines were unable to meet their mortgage and lost the plantation. The next owner was F.R. Klem, described by Holmgren as a merchant and "a land-hungry Northern speculator" (Holmgren 1959:117). Klem sold off a sizeable amount of the property to African Americans, including perhaps the portion of the plantation situated between Jarvis and Old House Creeks.

Honey Horn was acquired by William P. Clyde, owner of Clyde Steamship Lines of New York — along with about 9,000 acres elsewhere on Hilton Head Island — in 1900. He maintained the property as a hunting preserve until acquired by Roy Rainey. He fairly quickly sold his property to Landon K. Thorne and Alfred L. Loomis in 1931. While Thorne and Loomis acquired a very large holding, even purchasing small tracts from African Americans willing to sell, it does not appear that they acquired the area originally know as Tract 11.

When the land vaguely known as Honey Horn was sold by Thorne and Loomis to the Hilton Head Company in 1950, the timber map reveals that the study area was not included — it remained in private ownership by African Americans with small farm holdings. The community of Jonesville is clearly shown on the 1945 USGS topographic map of Bluffton (Figure 15).

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100 foot intervals along transects laid out at 100 foot intervals. All soil would be screened through ¼-inch mesh, with each test numbered sequentially by transect. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were slightly altered once survey was initialized. The survey methods for Area 1 were not altered. Areas 2 and 3 were initially laid out along 100-foot transects, but after surveying revealed dense shell middens, transects were added at 50-foot intervals in order to maximize the amount of surface area covered by the survey. Shovel tests along these transects were also added at 50-foot intervals. All of Area 4 was surveyed along 50-foot transects with shovel tests placed at 50-foot intervals.

Transects 1-15 were laid out along Area 1 with a total of 106 shovel tests. Areas 2 and 3 contained transects 16-32, which were laid in a 100-foot intervals. The additional 50-foot transect lines were labeled with the original transect number, then a .5 after the number. For example the transect laid in between the original transects 16 and 17 would be 16.5, between 17 and 18 would be 17.5, etc. Transects 15.5 to 19.5 and 25.5 to 31.5 were the additional 50-foot transects. Area 4 was initially laid out along 50-foot transects labeled 33-41. Areas 2-4 contained a total of 179 shovel tests. The entire property area consists of 53 transects and 285 shovel tests.

The GPS site locations were taken with a Garmin GPS 12XL rover and a Garmin 21 Beacon Receiver. The Garmin 12XL tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a consideration for the study area.

GPS accuracy is generally affected by a number of sources of potential error, including errors with satellite clocks, multipathing, and selective availability. Satellite clock errors can occur when the satellites's clock is off by a little as a millisecond, or when a slightly-askew orbit results in a distance error. Multipathing occurs when the signal bounces off trees, chain-link fences, or bodies of water. Multipathing was probably not a significant source of error for this study since many of the site areas were open or only lightly forested. The source of most extreme GPS errors is selective availability (SA), the deliberate mistiming of satellite signals by the Department of Defense. This degradation results in horizontal errors of up to 100 m 95% of the time, although the error may be as much as 300 m. Nevertheless, selective availability has been turned off by the DOD. We have previously

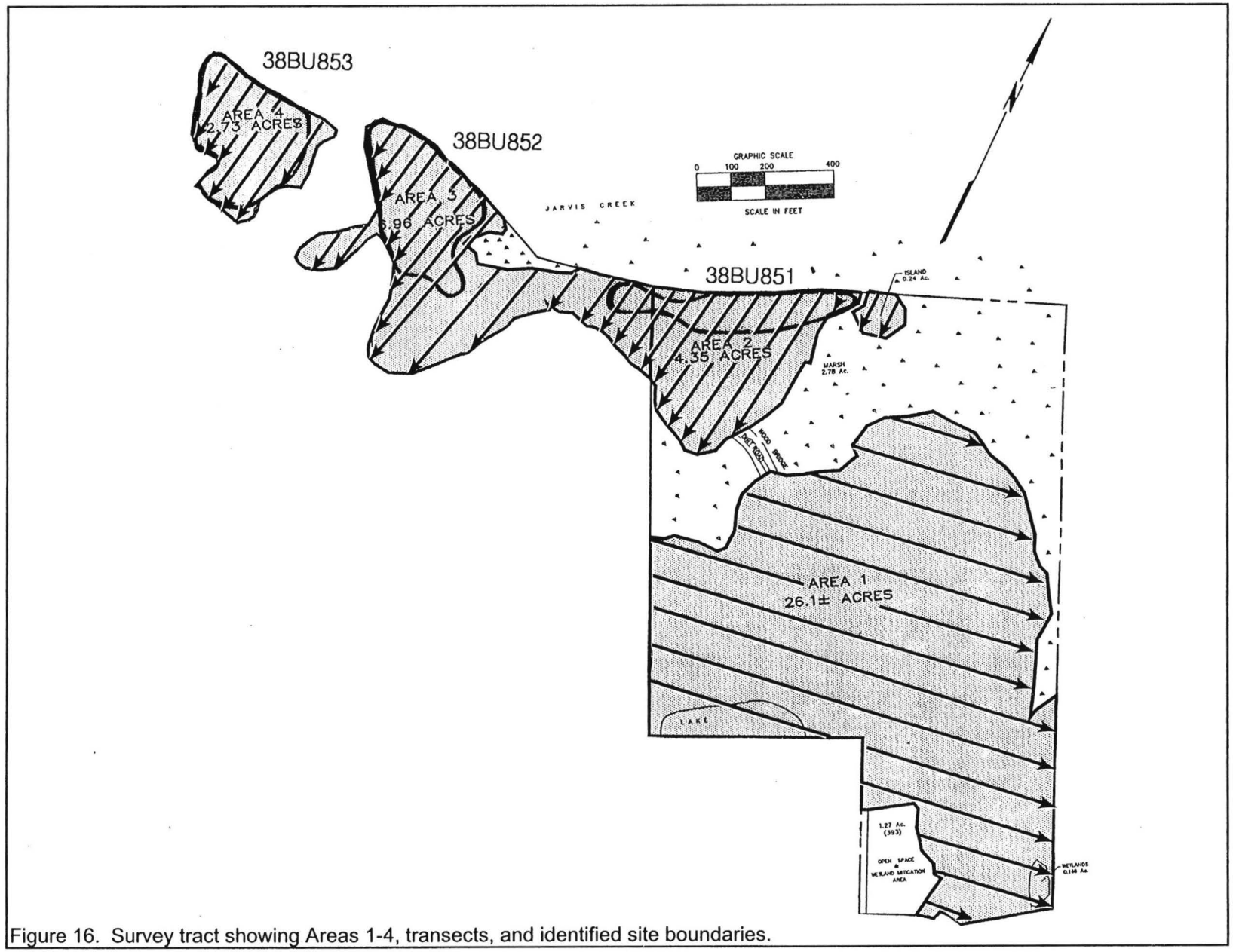

Figure 16. Survey tract showing Areas 1-4, transects, and identified site boundaries.

determined the 3D[1] and DGPS readings with the Garmin 12XL were identical. Therefore, we relied on 3D navigation mode, with expected potential horizontal errors of 6 m or less.

Architectural Survey

As previously discussed, we elected to use a 1.0 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which "have kept their integrity" (Anonymous n.d.:4) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

The survey was conducted by driving the public roads (typically county or state secondary roads) in the APE. The roads included only Jonesville Road (on which the survey tract was located) and Spanish Wells Road (on the opposite side of Old House Creek).

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
- identification of the historic

[1]A basis requirement for GPS position accuracy is having a lock on at least four satellites, which places the receiver in 3D mode. This is critical – as an example, positions calculated with less than four satellites can have horizontal errors in excess of a mile, or over 1,600 m.

context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials — the physical items used on and in the property — are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site form for the identified archaeological site has been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes and photographic materials have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete.

Analysis of the historic collections follow professionally accepted standards with a level of suitability to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1970) and South (1977). Glass artifacts are identified using sources such as Jones (1986), and Jones and Sullivan (1985). Sutton and Arkush (1996) provide an excellent overview of a broad range of other historic material, although primary sources will typically be provided in the text if the remains require a more detailed analysis. Prehistoric pottery from this area is examined using the broad typological definitions provided by DePratter (1979) and others.

RESULTS OF SURVEY

Introduction

The cultural resources identified during the intensive survey of the 40.1 acres for the Jarvis Cove Subdivision consist of three revisited shell midden sites, two of which are recommended eligible for inclusion on the National Register based on the work. Relatively undamaged by cultivation and erosion, we believe these areas can provide information on the early Woodland and other prehistoric peoples that made Hilton Head their home.

The project as proposed would affect all of the shell midden sites, but particularly 38BU852 in Area 3 and 38BU853 in Area 4. These two sites have the largest midden areas and potential for research, while 38BU851 in Area 2 has only a small, almost completely damaged midden area along the marsh edge. Area 1 is free from any midden or other site activity.

The architectural survey failed to identify any structures over 50 years old which have retained their integrity.

Archaeological Sites

38BU851

Site 38BU851 consists of a prehistoric shell midden located on the Jarvis Creek marsh edge with Jarvis Creek located about 1,500 feet to the north (Figure 18). The site elevation is approximately 5 feet AMSL. Topography in the area is flat.

Typical vegetation includes mostly young pines and palmetto trees, which signifies some type of previous disturbance, such as cultivation, as shown in the 1951 aerial photo of the area (Figure 21). A central UTM coordinate for the site is E522384 N3563365 (NAD27 datum). The site is accessible from Jonesville Road, located about 2,500 feet to the south.

Shovel tests were originally completed at the proposed 100-foot intervals (Transects 25 to 32), with the amount of shell in each test noted. After completing these tests, it was determined that 50-foot intervals would better define the midden boundary, so transects were added at 50-foot intervals between the original transects (designated by a .5 after the western transect number – for example, the 50-foot transect between Transect 25 and Transect 26 would be designated 25.5, between Transect 26 and 27 would be 26.5, etc.), along with shovel tests completed at 50-foot intervals along the new and original transects. Seven of these 50-foot interval

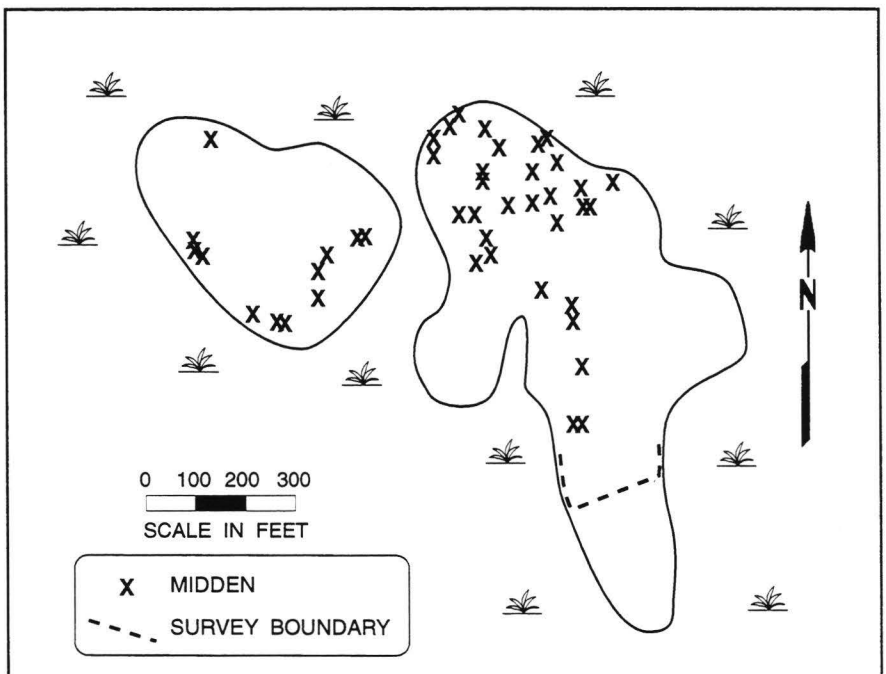

Figure 17. Locations of individual middens (map is USGS Bluffton 7.5').

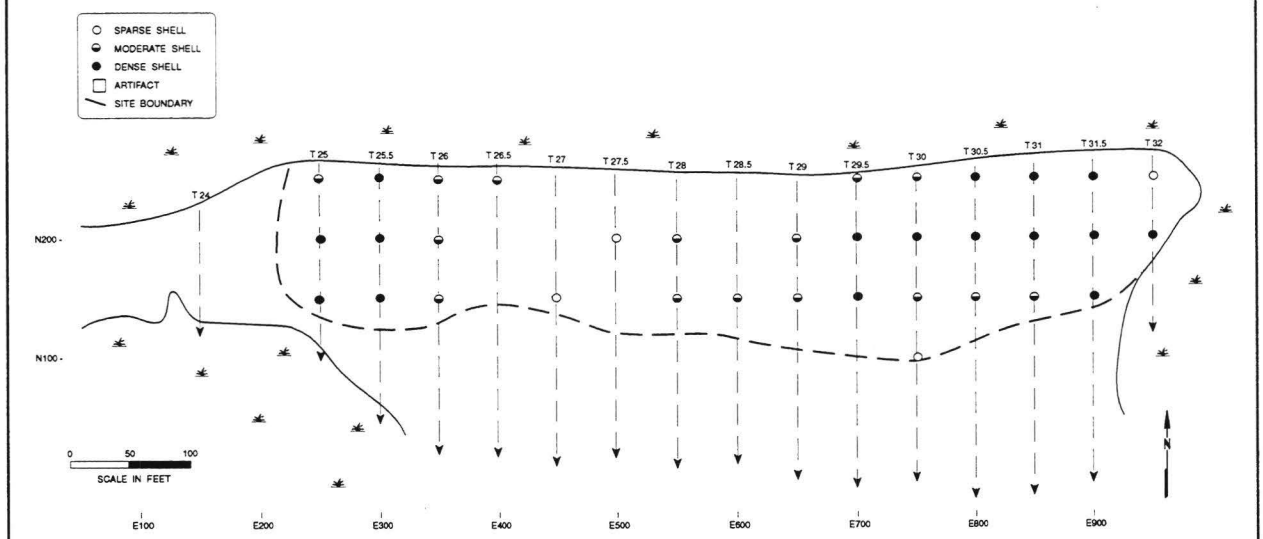

Figure 18. Sketch map of 38BU851.

transects were added, each with three shovel tests performed at 50-foot intervals from the marsh edge.

Since no artifacts were recovered, the site was identified based on the amount of shell in the shovel tests. The boundary was determined to be approximately 700 feet east-west by 100 feet north-south, with much of the midden eroding into the marsh.

Only two distinct middens were found within the site area. The smaller midden measures approximately 96 square feet with the larger midden encompassing about 150 square feet, but since much of the middens had been eroded into the marsh, it is difficult to estimate the actual size at the time of occupation.

The shovel tests all revealed Seabrook soils which are common along the marsh edge. This series typically has an Ap horizon of dark grayish-brown fine sand to a depth of 0.8 foot, over a light yellowish-brown fine sandy which can occur to a depth of up to 2.3 feet. In midden areas, shell (predominately oyster) was found in the A horizon, generally as a dense mass to a depth of about a foot. Elsewhere shell, while present, was fragmented and appeared to be scattered.

Shell midden research continues to be a

Table 1
Shell Middens in 38BU851

Easting	Northing	Size (NS x EW)	Size (sq ft)
522381	3563365	8' x 12'	96 ft²
522365	3563363	10' x 15'	150 ft²


Figure 19. Pines and Palmettos on 38BU851.

topic of disagreement in the archaeological community. The debate remains between those who are not convinced that the research is productive and those who think more attention at these sites would create a better understanding of middens. Trinkley (1993) discusses several topics that shell middens may be able to address, including the examination of ceramics for information on kin based groups and inter/intrasite ceramic diversity, radiocarbon dating of charcoal which could date the midden, and pollen analysis which may give us a better understanding of seasonal uses of the site.

Unfortunately, this shell midden did not produce any artifacts which could be used even for the basic temporal information. While shell middens tend to contain fewer amounts of pottery than other prehistoric sites, the severe erosion at the marsh edge may have eliminated what little was there in the first place. Although excavation of this small area of middens may


Figure 20. Shell midden eroding into the marsh.

provide some information of the group who inhabited this area, we believe that the erosion has been too great to warrant additional research, especially when the site is compared to nearby, better preserved examples. Also, with the limited number of distinct middens, it is difficult to assess the nature or extent of site occupation. Therefore, we recommend this site not eligible for inclusion on the National Register. No additional management activities are recommended pending review of the lead agency and the State Historic Preservation Office.

Figure 21. 1951 Aerial photo of the project area.

38BU852

Site 38BU852 consists of a shell midden along the marsh edge and further inland at an elevation of about 5 feet AMSL. Jarvis Creek is located about 800 feet north of the site and the topography is flat.

Typical vegetation around this peninsular

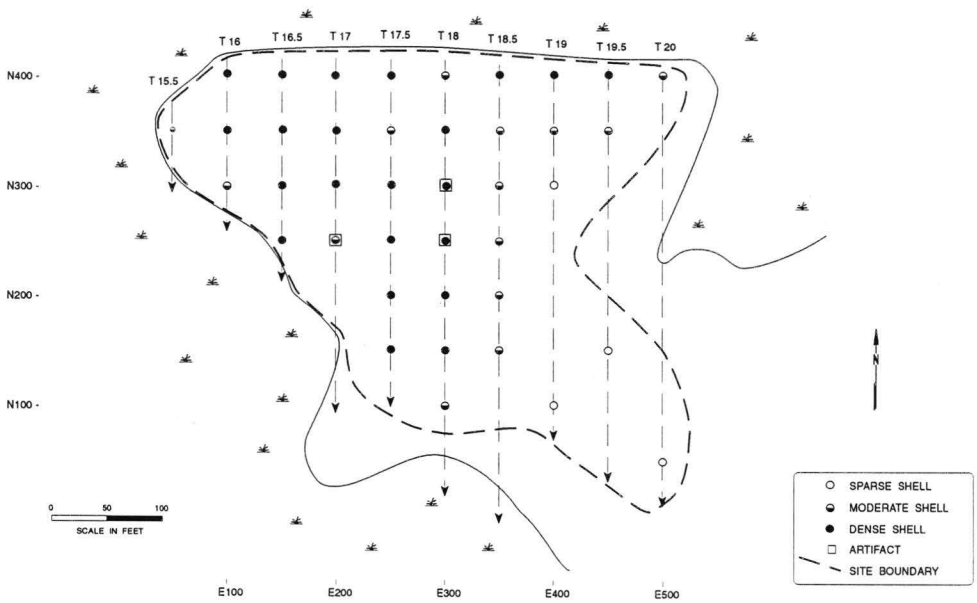

Figure 22. Sketch map of 38BU852.

Table 2
Shell Middens in 38BU852

Easting	Northing	Size (NS x EW)	Size (sq ft)
521986	3563338	10' x15'	150 ft²
521999	3563360	30' x 40'	1200 ft²
521997	3563355	15' x 10'	150 ft²
521985	3563346	15' x 12'	180 ft²
522018	3563353	30' x 45'	1350 ft²
522027	3563344	30' x 40'	1200 ft²
522057	3563337	30' x 30'	900 ft²
522054	3563335	30' x 20'	600 ft²
522048	3563325	30' x 15'	450 ft²
522060	3563331	25' x 20'	500 ft²
522055	3563313	50' x 25'	1250 ft²
522078	3563310	25' x 25'	625 ft²
522076	3563317	25' x 25'	625ft²
522095	3563322	15' x 15'	225 ft²
522059	3563293	20' x 15'	300 ft²
522074	3563308	30' x 25'	750 ft²
522050	3563306	20' x 12'	240 ft²
522034	3563304	15' x 15'	225 ft²
522013	3563325	30' x 20'	600 ft²
522011	3563323	30' x 40'	1200 ft²
521997	3563300	20' x 15'	300 ft²
522011	3563299	30' x 30'	900 ft²
522021	3563288	15' x 15'	225 ft²
522012	3563269	12' x 15'	180 ft²
522024	3563277	25' x 15'	375 ft²
522053	3563255	20' x 25'	500 ft²
522072	3563248	25' x 25'	625 ft²
522071	3563237	15' x 15'	225 ft²
522079	3563205	20' x 30'	600 ft²
522075	3563174	30' x 20'	600 ft²
522072	3563172	10' x 10'	100 ft²

area consists of mostly hardwoods and palmettos with additional underbrush some areas. This portion of the property has been used for horse trails, so much of the area is exposed. There is not, however, any indication of the disturbance noted at 38BU851. In fact, the 1951 aerial of the survey area shows 38BU852 completely wooded with no evidence of cultivation (Figure 21). A central UTM coordinate for the site is E522020 N3563360 (NAD27 datum) and the site is accessible from Jonesville Road, located about 3,500 feet to the south.

Shovel tests were originally completed at the proposed 100-foot intervals, but after many of the tests revealed dense shell, it was decided to add transects at 50-foot intervals to better designate midden boundaries. Transects 16-20 were the original 100-foot interval transects, and a .5 was added to the western most transect at 50-foot intervals (for example, the transect between 16 and 17 would be designated 16.5, the transect between 17 and 18 would be 17.5, etc.). Five additional transects were added, numbered 15.5 to 19.5.

Forty-five shovel tests were excavated all revealing Seabrook soils. This series produces a 0.8 foot Ap layer of dark grayish-brown fine sand over a light yellowish-brown fine sand to a depth of 2.3 feet. Of the 45 tests, only three shovel tests produced artifacts. Of these three positive tests, a total of 12 artifacts were recovered including two pieces of St. Catherines Simple Stamp pottery (N250 E300), one unidentified St. Catherines sherd (N250 E200), six Deptford Cord Marked sherds (two at N250 E300 and four at N300 E300), two unidentified sherds (N250 E300), and one fragment of animal bone (N250 E300).

At least 30 individual middens were identified within the site area. All the middens were relatively large with the smallest 10 by 10 feet and the largest 30 by 45 feet (the mean is approximately 560 square feet) (Table 2). The middens at 38BU852 seem much larger than those examined at Old House Creek, although this survey was less intensive than the one performed in 1994 (Trinkley and Adams 1994:50). The


Figure 23. Shell midden eroding out of the surface.

majority of the middens are clustered in the northern portion of the peninsula which may suggest a more intensive occupation in the area. Middens also occupy the western and southern portions of the area, but with less clustering, these middens show more clearly defined occupations. This may be evidence of expansion to less crowded areas of the peninsula.

As previously mentioned, shell midden research has been a topic of debate. We believe there are many issues pertinent to midden research, including analysis of ceramics for information on kin based groups, radiocarbon dating of charcoal to date each level of the shell midden, and pollen analysis which could reveal information on seasonality of the site.

Beyond these more laboratory oriented analyses (e.g. chemical analysis or radiocarbon dating), the artifacts themselves may provide significant information concerning this site. The two types of diagnostic sherds place at least a portion of the midden within the Middle to possibly Late Woodland. In addition, the recovery of faunal remains suggests the site can provide dietary and seasonal information. Even a brief physical analysis of the shellfish may be useful as an indicator of season. With the use of laboratory techniques, a chemical analysis of the pottery could perhaps aid in addressing typological questions or determining the possible origin of various groups. Charcoal, which is present at the site might be tied to various middens, providing a more exact occupation date.

A more detailed examination of the site is likely to open a variety of additional research topics. By using smaller mesh (e.g. ⅛-inch) the smaller floral and faunal materials (e.g. fish bones) could be recovered – helping to identify dietary evidence, which is often overlooked or lost. Close interval auger testing would better identify intrasite variability and patterning by locating discrete midden areas (Trinkley 1993). In fact, a variety of previous studies have clearly shown that the only way to address these topics is through intensive investigations (Trinkley 1993). Although shell middens are likely to produce smaller artifacts and a smaller number of specimens than some other site types, this does not mean that no research is possible or appropriate. Rather it means that the site will require different – probably more rigorous – approaches.

Therefore, we recommend this site eligible for inclusion on the National Register of Historic Places under Criterion D (information potential). This site has the potential to address a wide variety of significant research questions for those with the patience to conduct the appropriate studies.

38BU853

Site 38BU853 consists of a shell midden located on the marsh edge of a small island. The elevation stays consistent at 5 feet AMSL and a central UTM coordinate is E521850 N3563300 (NAD27 datum).

Vegetation on the island consists of hardwoods and palmettos with several varieties of interspersed underbrush (Figure 25). Unlike the stet mainland, this island's vegetation is significantly more dense and grown up. A cleared horse trail is found around the periphery of the island, but the vegetation on the interior is very dense. The 1951 aerial photo of the area shows the interior of the island cultivated and the periphery still wooded (Figure 21).

Close to 100 feet separate the island from the mainland and when the tide is up, several feet of water may cover this access route. Jarvis Creek is located about 500 feet north of the island (Figure 26).

Since shell was noticed at the surface in many areas of the island, shovel tests were completed at 50-foot intervals along transects placed at 50-foot intervals. Transects 33 to 41 were completed on the island with 33 of the 49 shovel tests producing shell. Only one shovel test (T39 ST1) produced artifacts. All the shovel tests yielded Seabrook soils, which exhibit an Ap horizon of dark grayish-brown fine sand to a depth of 0.8 foot over a light yellowish-brown fine sand which can occur to a depth of 2.3 feet.

Only two artifacts were recovered from the single positive shovel test, two sherds of Stallings plain pottery (N300 E150) which can be mended together. Based on the amount of shell in each shovel test, a site dimension is estimated at 350 feet east-west by 250 feet north-south. A modern still pit was also found on the eastern portion of

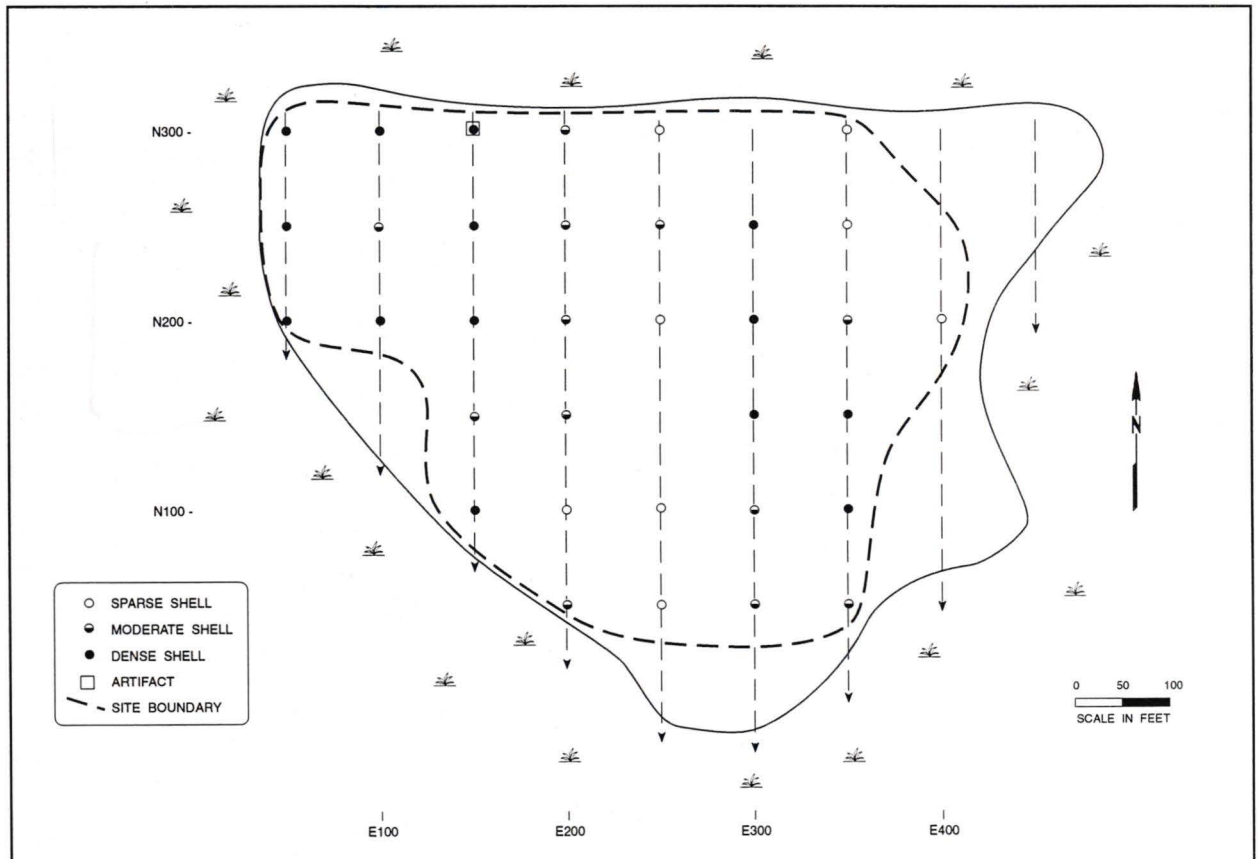

Figure 24. Sketch map of 38BU853.

Table 3
Shell Middens on 38BU853

Easting	Northing	Size (NS x EW)	Size (sq ft)
521845	3563344	5' x 20'	100 ft²
521840	3563283	30' x 20'	600 ft²
521844	3563277	10' x 10'	100 ft²
521842	3563283	15' x 15'	225 ft²
521844	3563272	20' x 50'	1000 ft²
521873	3563239	15' x 15'	225 ft²
521885	3563234	10' x 15'	150 ft²
521914	3563248	20' x 20'	400 ft²
521896	3563232	10' x 12'	120 ft²
521918	3563274	5' x 5'	25 ft²
521912	3563270	10' x 15'	150 ft²
521940	3563281	20' x 20'	400 ft²
521936	3563281	15' x 20'	300ft²

the island, but no artifacts were found in association with the hole (Figure 27).

The survey work has determined that this site consists of at least 13 middens (see Table 3) ranging in size from as small as about 5 feet in diameter up to middens measuring 30 by 20 feet. Small middens seem to be the minority, with most between about 10 by 10 and 20 by 20 (the mean is 250 square feet). This seems slightly larger than the data from Old House Creek (Trinkley and Adams 1994:50) although the data collections here at the survey level is not nearly so rigorous. Regardless, we see the same spread of sizes, suggesting again that there is some uniformity in the midden formation process.

When the location of these individual middens is examined (see Figure 18), another pattern may be noticed. While middens are clearly defined on the northwest, west, south, and southeast edges of the island, those to the north appear blended together – perhaps suggesting for more intensive occupation in the area. In addition, middens elsewhere appear to be found in clusters. These may represent individual periods of occupation. Finally, the center of the island may have been less intensively used than

Figure 25. Thick underbrush located throughout the island.

its margins. It is also possible that cultivation of the interior of the island, shown in the 1951 aerial (see Figure 21), has destroyed what middens were located in that area or shifted the interior middens to the outer edges of the island.

Figure 26. Northwest edge of island showing shell midden and Jarvis Creek.

The research questions for this site are extraordinary. Additional analyses of pollen, charcoal, and shellfish will also aid in our understanding of the groups which inhabited Hilton Head Island and the range of potential questions, focusing on diet, settlement, and temporal span has been previously outlined for 38BU852. This site, unlike 38BU852 however, has also produced very Early Woodland and Late Archaic Stallings pottery – adding another dimension to the potential research opportunities. 38BU853 has the potential to provide significant information through a variety of research techniques.

Figure 27. Still pit in eastern portion of the island.

Therefore, we are recommending this site eligible for inclusion on the National Register of Historic Places under Criterion D (information potential).

Historic and Architectural Resources

There are no architectural or historical sites identified within the 1.0 mile APE. The structures visible from the project area appear to be modern, perhaps constructed within the past two to three decades. No other historical structure is seen from the survey area which has retained its integrity.

CONCLUSIONS

This study involved the examination of 40.1 acres to be used as part of the Jarvis Cove Subdivision situated on the north side of Jonesville Road about a mile west of its junction with Spanish Wells Road. The project tract is intended to be used for construction of single family dwellings. The project will result in clearing, grubbing, grading, construction of a development road, placement of underground utilities, and construction of individual houses. It is likely that this work will destroy any archaeological remains which are present on the property and this work was conducted to assist the developers comply with their historic preservation responsibilities.

Historic research reveals that this area was historically part of Honey Horn Plantation, although it is shown as cultivated acreage throughout most of its history (for brief periods it was likely pasturage or allowed to grow up in woods; dense shell middens were likely never cultivated or otherwise disturbed). The African American Jonesville community, for which the road is named, appears to be a very late nineteenth or early twentieth century kin-based community developed as some of Honey Horn was sold off.

Although there was limited surface visibility in some areas, access throughout the tract was easy and there were no obstacles to shovel testing. A series of 53 transects were laid out along the entire property. Area 1 had transects oriented magnetic north-south at 100 foot intervals and shovel tests were conducted on these transects at 100 foot intervals. Transects through Areas 2-4 were laid out in an east-west orientation at 50 foot intervals with shovel tests in dense midden areas conducted at 50 foot intervals. A total of 285 shovel tests were excavated on these transects.

Three archaeological sites, 38BU851-853, were identified during a revisit this survey area. Site 38BU851 consists of a prehistoric shell midden located on the marsh edge of Jarvis Creek. No artifacts were uncovered at this site and the heavy erosion along with historic logging and cultivation of this area make it unlikely that this midden will be able to provide any significant information. This site is recommended not eligible for inclusion on the National Register of Historic Places. Site 38BU852, also a large midden area, produced 12 artifacts dating the site to the Middle to Late Woodland period. This area contained over 30 individual middens, creating the potential to address questions of kin based groups, inter/intra site ceramic diversity, and seasonal patterns. This site is recommended eligible for inclusion on the National Register of Historic Places. The final site, 38BU853, also a shell midden, produced two Stallings Plain sherds dating the site to the Late Archaic. Like the previous site, 38BU853 has the potential to provide information crucial in addressing shell midden research questions. This site is also recommended eligible for inclusion on the National Register of Historic Places.

The failure to recover more artifacts within each of the sites is not uncommon. Shell middens tend to contain smaller amounts of cultural material than other prehistoric sites. We anticipate, however, that further large scale excavations will reveal more information about the people who inhabited these sites.

Development of Area 1 should be allowed to proceed. No evidence of prehistoric activity was found within this area. While Area 2 did produce one site, 38BU851, this midden evidences disturbance from historic land use activities, as well as severe erosion. The site is recommended not eligible and no further management activities are recommended. Pending the review and approval of the State Historic Preservation Office, this area may also be used for development activities.

No construction activities should take place in Areas 3 and 4 without data recovery. Further, a fence should be erected around these

areas so as to avoid any land altering activities. Alternatively, it may be possible to turn the areas into a passive neighborhood park, but access should be controlled to prevent future damage or looting.

The failure to identify historic sites may be associated with the location of the project. The research reveals that this was agricultural land associated with Honey Horn and there is no indication that any slave settlement or other occupation took place in this vicinity. It probably wasn't until the end of the nineteenth century when some of the lands were sold, that any historic development took place in the area.

A survey of historic sites was conducted within a 1.0 mile APE. No structures possessing integrity were encountered.

It is possible that archaeological remains may be encountered in Area 1 during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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